

**Remarks:**

Claims 1-12 and 27-32 were previously pending. The Examiner rejected claims 1-12 and withdrew from consideration claims 27-32. Applicants have canceled claims 5-10 and 12-32 without prejudice or disclaimer, amended claims 1-4 and 11, and added dependent claims 33-38, all of which depend directly or indirectly from independent claim 1.

In the last Office Action, the Examiner again withdrew newly-added independent claims from consideration, stating that the “newly submitted claims recite limitations not essential, but patentably distinct from the originally claimed apparatus.” (June 23, 2004, Office Action, Page 2). In an attempt to forego additional withdrawal of claims by the Examiner, Applicants have only added new dependent claims that depend, directly or indirectly, from independent claim 1, which the Examiner has continually examined. Applicants appreciate the Examiner’s willingness to discuss the prior restriction requirements with Applicants’ representative.

In the last Office Action, the Examiner rejected claims 1-12 under 35 U.S.C. § 103 in view of the new reference to Spiess, et al. Applicants have amended independent claim 1 in view of the Examiner’s rejections and to further clarify and claim the structure that Applicants believe is the present invention. In particular, Applicants submit that the features now claimed in claim 1 and not found in Spiess or other prior art references of record include the following:

- (1) at least one crossbar, **each of which is operable to be secured to the frame;**
- (2) a plurality of tread bars **supported by and positioned on top of the at least one crossbar;** and
- (3) at least one locking element, each of which is **structurally separate from the frame and grate and of a rigid construction,** such that each locking element is operable to interface with the frame so as to secure each crossbar to the frame.

Claim 1 now recites that each crossbar is operable to be secured to the frame. In comparison, the crossbars in Spiess, identified by the Examiner as the horizontal bars in Fig. 1a, cannot all be secured to the frame. Instead, the crossbars are integrally formed with the tread bars, identified by the Examiner as the vertical bars in Fig. 1a. Only the two end crossbars are secured to the frame.

Further, Spiess offers no structure operable to allow the other crossbars to be secured to the frame. Because “integrally formed with” is not the same structure as “operable to be secured to,” Applicants respectfully submit that neither Spiess nor any other prior art reference of record discloses each of the crossbars being operable to be secured to the frame.

In the last Amendment filed by the Applicants, independent claim 1 recited the feature that the at least one crossbar supports the at least one tread bar. The Examiner responded that although Spiess does not disclose the crossbars supporting the tread bars, it would have been obvious to one of ordinary skill in the art “to have added an additional tread bar in between the two existing tread bars in order to increase safety of the grate assembly.” (June 23, 2004, Office Action, Page 3). Applicants first note that adding an additional tread bar as suggested by the Examiner does not structurally affect whether the crossbars supports the tread bars. In other words, even if Spiess was modified as suggested, the crossbars would still not **support** the tread bars. As Applicants understand the Examiner’s proposed modification, any additional tread bar added would have to be integrally formed with the crossbars, as are the tread bars on each end of Spiess presently. Alternatively, a tread bar could be positioned below the crossbars, but there is no structural purpose for such modification and at the very least, the crossbar would not be supporting the tread bar, as currently claimed. A further alternative could be to position a tread bar above the crossbar, but then the tread bar would protrude from the grate assembly and be hazardous to pedestrians, bikes, or others crossing the grate assembly. Therefore, Applicants are confused as to the Examiner’s rationale for why supporting the tread bars is obvious and ask for further clarification should the Examiner continue to maintain the rejection.

Notwithstanding the above, Applicants have further recited the feature that the tread bars are positioned **on top of** the crossbars. Spiess most certainly does not disclose the tread bars positioned on top of the crossbars and such would be undesirable, as it would provide an opportunity for pedestrians to trip or would be an unnecessary protrusion to vehicles, as noted above.

As the Examiner has noted, Spiess does disclose a locking element generally referred to as reference numeral 7. However, the locking element is **integrally formed** with the frame, as best illustrated in Fig. 1b, and is adapted to secure the grate within the frame. Additionally, the locking element 7 of Spiess requires a member, labeled as retention part 6, to be “elastically deformed.”

(Spiess, Column 2, lines 22-23). Therefore, Spiess does not disclose a locking element that is **structurally separate** from the frame and grate and that is of a **rigid construction**.

Dependent claim 3 recites the feature that the frame 14 includes a shelf 36 extending downwardly from a horizontal ledge 28. In comparing the claimed structure to Spiess, there is no counterpart structure to the claimed downwardly extending shelf, wherein the shelf extends from a horizontal ledge. In response to Applicants past claims that also recited features including “shelves” and “ledges,” the Examiner has merely responded that the frame in Spiess “includes ledges and downwardly extending shelves.” (June 23, 2004, Office Action, Page 3). Although such may be generally true, Applicants request the Examiner read the claim as a whole, and in particular, the claimed feature that the shelf extends downwardly from a horizontal shelf, which Applicants submit is not disclosed in Spiess. Should the Examiner disagree, Applicants request the Examiner elaborate on what features in Spiess disclose the claimed features.

Dependent claim 4 recites the feature that each crossbar includes a plurality of upstanding members positioned adjacent each other along a length of the crossbar. These adjacent members are the generally triangularly shaped members illustrated in Fig. 3 of the present application and disclosed at page 5, lines 26-30. It is clear that Spiess does not disclose any such upstanding members positioned along the length of each crossbar, and thus, Applicants submit that claim 4 is allowable over the prior art references of record.

Dependent claim 11 recites the feature that the locking element comprises a bar having a length approximately at least the same as a length of the crossbar. In the last Office Action, the Examiner stated that locking element 7 in Spiess meets the recitation of a flat bar. However, Applicants submit that amended dependent claim 7 recites features that could not be construed as being disclosed by Spiess and in particular the recited feature that the bar is approximately at least the same length as the crossbar.

New dependent claim 33 recites that each tread bar is positioned between adjacent upstanding members. Because Spiess does not disclose the upstanding members nor does Spiess disclose the crossbars supporting the tread bars, it is clear that Spiess does not disclose the recited features of claim 33. Similarly, dependent claim 34 also includes structure that is based off of the upstanding members.

New dependent claim 35 recites further features of the locking element, including an upturned, vertical member adapted to interface with and contact the downwardly extending shelf of the frame. As Spiess does not disclose a downwardly extending shelf, nor does Spiess disclose a locking element having an upturned, vertical member, Applicants submit that dependent claim 35 is allowable over the prior art references of record.

Dependent claims 36 and 37 seek to identify features and advantages thereof that the present invention has over prior art grate assemblies. In particular, dependent claim 36 limits the number of sides of the frame set within the watercourse to three. Such is possible with the structure of the present invention because it may be a single grate assembly or it may be more than one grate assembly laid end-to-end, as claimed in claim 37. Fig. 1a of Spiess clearly shows a cover or grate in a single unit that is surrounded on all four of its sides with the frame. Further, it is clear that Spiess relies on locking elements at both ends of the grate to lock the grate into place. Therefore, there is no structure disclosed in Spiess to allow two grates to be positioned adjacent each other. Applicants submit that the recited structure of dependent claims 36 and 37 cannot be accomplished by the structure of Spiess, and thus, dependent claims 36 and 37 are allowable over the prior art references of record.

Dependent claim 38 seeks to claim the feature that the crossbars of the present invention may be positioned either perpendicular or parallel to the frame. In contrast, Spiess requires that the crossbar and the frame section to which it is secured be parallel to each other. The figures of Spiess clearly show that there is no structural opportunity, given that the Examiner has already established that the vertical bars in Spiess are the tread bars and the horizontal bars are the crossbars, for the crossbars to be secured to a section of the frame to which they are perpendicular. The present invention provides the advantage that the locking element may be used irrespective of the direction of the crossbar.

In view of this response and the remarks herein, Applicants respectfully submit that claims 1-4, 11, and 33-38 are in allowable condition and requests a corresponding Notice of Allowance. In the event of further questions, the Examiner is urged to call either Jennifer C. Bailey, Registration No. 52,583, or the undersigned. Any additional fee which might be due in connection with this application should be applied against our Deposit Account No. 19-0522.

Respectfully submitted,

HOVEY WILLIAMS LLP

BY: 

Thomas B. Luebbering, Reg. No. 37,874  
2405 Grand Blvd., Suite 400  
Kansas City, Missouri 64108  
(816) 474-9050

ATTORNEYS FOR APPLICANTS